

*0920
0320*

OIPE

#3

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/902,187

DATE: 12/13/2001
 TIME: 15:00:04

Input Set : N:\paola\09902187.txt
 Output Set: N:\CRF3\12132001\I902187.raw

```

3 <110> APPLICANT: Millis, James R.
4   Saucy, Gabriel G
5   Maurina-Brunker, Julie
6   McMullin, Thomas W.
8 <120> TITLE OF INVENTION: METHOD OF VITAMIN PRODUCTION
10 <130> FILE REFERENCE: 3161-29
12 <140> CURRENT APPLICATION NUMBER: 09/902,187
13 <141> CURRENT FILING DATE: 2001-07-09
15 <150> PRIOR APPLICATION NUMBER: 09/348,097
16 <151> PRIOR FILING DATE: 1999-07-06
18 <160> NUMBER OF SEQ ID NOS: 51
20 <170> SOFTWARE: PatentIn Ver. 2.0
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 23
24 <212> TYPE: DNA
25 <213> ORGANISM: Artificial Sequence
27 <220> FEATURE:
28 <221> NAME/KEY: misc_feature
29 <222> LOCATION: (1)..(23)
30 <223> OTHER INFORMATION: PRIMER
32 <220> FEATURE:
33 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
35 <400> SEQUENCE: 1
36 ctcagtacgc tggtaccgt cac
38 <210> SEQ ID NO: 2
39 <211> LENGTH: 27
40 <212> TYPE: DNA
41 <213> ORGANISM: Artificial Sequence
43 <220> FEATURE:
44 <221> NAME/KEY: misc_feature
45 <222> LOCATION: (1)..(27)
46 <223> OTHER INFORMATION: PRIMER
48 <220> FEATURE:
49 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
51 <400> SEQUENCE: 2
52 gatggatccc aatatgtgt a gtcagg
54 <210> SEQ ID NO: 3
55 <211> LENGTH: 22
56 <212> TYPE: DNA
57 <213> ORGANISM: Artificial Sequence
59 <220> FEATURE:
60 <221> NAME/KEY: misc_feature
61 <222> LOCATION: (1)..(22)
62 <223> OTHER INFORMATION: PRIMER
64 <220> FEATURE:
65 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
67 <400> SEQUENCE: 3

```

ENTERED

23

27

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/902,187

DATE: 12/13/2001
TIME: 15:00:04

Input Set : N:\paola\09902187.txt
Output Set: N:\CRF3\12132001\I902187.raw

68 gcgcatccac gggctatata aa 22
70 <210> SEQ ID NO: 4
71 <211> LENGTH: 26
72 <212> TYPE: DNA
73 <213> ORGANISM: Artificial Sequence
75 <220> FEATURE:
76 <221> NAME/KEY: misc_feature
77 <222> LOCATION: (1)..(26)
78 <223> OTHER INFORMATION: PRIMER
80 <220> FEATURE:
81 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
83 <400> SEQUENCE: 4
84 gcgatcccta ttatgttaacttag 26
86 <210> SEQ ID NO: 5
87 <211> LENGTH: 22
88 <212> TYPE: DNA
89 <213> ORGANISM: Artificial Sequence
91 <220> FEATURE:
92 <221> NAME/KEY: misc_feature
93 <222> LOCATION: (1)..(22)
94 <223> OTHER INFORMATION: PRIMER
96 <220> FEATURE:
97 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
99 <400> SEQUENCE: 5
100 gagcatccac gggctatata aa 22
102 <210> SEQ ID NO: 6
103 <211> LENGTH: 26
104 <212> TYPE: DNA
105 <213> ORGANISM: Artificial Sequence
107 <220> FEATURE:
108 <221> NAME/KEY: misc_feature
109 <222> LOCATION: (1)..(26)
110 <223> OTHER INFORMATION: PRIMER
112 <220> FEATURE:
113 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
115 <400> SEQUENCE: 6
116 tccccccggg cgcagacttc acgctc 26
118 <210> SEQ ID NO: 7
119 <211> LENGTH: 31
120 <212> TYPE: DNA
121 <213> ORGANISM: Artificial Sequence
123 <220> FEATURE:
124 <221> NAME/KEY: misc_feature
125 <222> LOCATION: (1)..(31)
126 <223> OTHER INFORMATION: PRIMER
128 <220> FEATURE:
129 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
131 <400> SEQUENCE: 7
132 gatccgcggc tcaagcttagc ggtattatgc c 31

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/902,187

DATE: 12/13/2001
TIME: 15:00:04

Input Set : N:\paola\09902187.txt
Output Set: N:\CRF3\12132001\I902187.raw

134 <210> SEQ ID NO: 8
135 <211> LENGTH: 29
136 <212> TYPE: DNA
137 <213> ORGANISM: Artificial Sequence
139 <220> FEATURE:
140 <221> NAME/KEY: misc_feature
141 <222> LOCATION: (1)..(29)
142 <223> OTHER INFORMATION: PRIMER
144 <220> FEATURE:
145 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
147 <400> SEQUENCE: 8
148 gactctagag tttacgagtc tggaaaatc 29
150 <210> SEQ ID NO: 9
151 <211> LENGTH: 28
152 <212> TYPE: DNA
153 <213> ORGANISM: Artificial Sequence
155 <220> FEATURE:
156 <221> NAME/KEY: misc_feature
157 <222> LOCATION: (1)..(28)
158 <223> OTHER INFORMATION: PRIMER
160 <220> FEATURE:
161 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
163 <400> SEQUENCE: 9
164 gtaggatcca tggaattttagag caatagag 28
166 <210> SEQ ID NO: 10
167 <211> LENGTH: 33
168 <212> TYPE: DNA
169 <213> ORGANISM: Artificial Sequence
171 <220> FEATURE:
172 <221> NAME/KEY: misc_feature
173 <222> LOCATION: (1)..(33)
174 <223> OTHER INFORMATION: PRIMER
176 <220> FEATURE:
177 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
179 <400> SEQUENCE: 10
180 aattccaaagg ttgcggccgc tctagaacgc gtg 33
182 <210> SEQ ID NO: 11
183 <211> LENGTH: 32
184 <212> TYPE: DNA
185 <213> ORGANISM: Artificial Sequence
187 <220> FEATURE:
188 <221> NAME/KEY: misc_feature
189 <222> LOCATION: (1)..(32)
190 <223> OTHER INFORMATION: PRIMER
192 <220> FEATURE:
193 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
195 <400> SEQUENCE: 11
196 gatccacgcg ttcttagagcg gccgcaagct tg 32
198 <210> SEQ ID NO: 12

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/902,187

DATE: 12/13/2001
TIME: 15:00:04

Input Set : N:\paola\09902187.txt
Output Set: N:\CRF3\12132001\I902187.raw

199 <211> LENGTH: 25
200 <212> TYPE: DNA
201 <213> ORGANISM: Artificial Sequence
203 <220> FEATURE:
204 <221> NAME/KEY: misc_feature
205 <222> LOCATION: (1)..(25)
206 <223> OTHER INFORMATION: PRIMER
208 <220> FEATURE:
209 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
211 <400> SEQUENCE: 12
212 gaattcgtt ataaggacag cccga 25
214 <210> SEQ ID NO: 13
215 <211> LENGTH: 26
216 <212> TYPE: DNA
217 <213> ORGANISM: Artificial Sequence
219 <220> FEATURE:
220 <221> NAME/KEY: misc_feature
221 <222> LOCATION: (1)..(26)
222 <223> OTHER INFORMATION: PRIMER
224 <220> FEATURE:
225 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
227 <400> SEQUENCE: 13
228 ctgcagtctt taactgacgg cagcga 26
230 <210> SEQ ID NO: 14
231 <211> LENGTH: 52
232 <212> TYPE: DNA
233 <213> ORGANISM: Artificial Sequence
235 <220> FEATURE:
236 <221> NAME/KEY: misc_feature
237 <222> LOCATION: (1)..(52)
238 <223> OTHER INFORMATION: PRIMER
240 <220> FEATURE:
241 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
243 <400> SEQUENCE: 14
244 agctgaattc gagtcggta cccgggctct agagtcgacc tgcaggcatg ca 52
246 <210> SEQ ID NO: 15
247 <211> LENGTH: 52
248 <212> TYPE: DNA
249 <213> ORGANISM: Artificial Sequence
251 <220> FEATURE:
252 <221> NAME/KEY: misc_feature
253 <222> LOCATION: (1)..(52)
254 <223> OTHER INFORMATION: PRIMER
256 <220> FEATURE:
257 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
259 <400> SEQUENCE: 15
260 agcttgcatg cttccaggc gactctagag cccgggtacc gagctcgaa tc 52
262 <210> SEQ ID NO: 16
263 <211> LENGTH: 29

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/902,187

DATE: 12/13/2001
TIME: 15:00:04

Input Set : N:\paola\09902187.txt
Output Set: N:\CRF3\12132001\I902187.raw

264 <212> TYPE: DNA
265 <213> ORGANISM: Artificial Sequence
267 <220> FEATURE:
268 <221> NAME/KEY: misc_feature
269 <222> LOCATION: (1)..(29)
270 <223> OTHER INFORMATION: PRIMER
272 <220> FEATURE:
273 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
275 <400> SEQUENCE: 16
276 gacggatccg tggaatattt cgatatcc 29
278 <210> SEQ ID NO: 17
279 <211> LENGTH: 34
280 <212> TYPE: DNA
281 <213> ORGANISM: Artificial Sequence
283 <220> FEATURE:
284 <221> NAME/KEY: misc_feature
285 <222> LOCATION: (1)..(34)
286 <223> OTHER INFORMATION: PRIMER
288 <220> FEATURE:
289 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
291 <400> SEQUENCE: 17
292 ctcggatccg gacggattac aacaggtatt gtcc 34
294 <210> SEQ ID NO: 18
295 <211> LENGTH: 31
296 <212> TYPE: DNA
297 <213> ORGANISM: Artificial Sequence
299 <220> FEATURE:
300 <221> NAME/KEY: misc_feature
301 <222> LOCATION: (1)..(31)
302 <223> OTHER INFORMATION: PRIMER
304 <220> FEATURE:
305 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
307 <400> SEQUENCE: 18
308 cagaattcac catggccgtg acttcctcct c 31
310 <210> SEQ ID NO: 19
311 <211> LENGTH: 32
312 <212> TYPE: DNA
313 <213> ORGANISM: Artificial Sequence
315 <220> FEATURE:
316 <221> NAME/KEY: misc_feature
317 <222> LOCATION: (1)..(32)
318 <223> OTHER INFORMATION: PRIMER
320 <220> FEATURE:
321 <223> OTHER INFORMATION: Description of Artificial Sequence:PRIMER
323 <400> SEQUENCE: 19
324 caagatctca tacatcatat cctcatggac ac 32
326 <210> SEQ ID NO: 20
327 <211> LENGTH: 31
328 <212> TYPE: DNA

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/902,187

DATE: 12/13/2001

TIME: 15:00:05

Input Set : N:\paola\09902187.txt

Output Set: N:\CRF3\12132001\I902187.raw